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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/533,286

04/29/2005

Atsuo Okaichi

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6018

23850

7590

12/21/2006

ARMSTRONG, KRATZ, QUINTOS, HANSON & BROOKS, LLP
1725 K STREET, NW
SUITE 1000
WASHINGTON, DC 20006

EXAMINER

TRIEU, THERESA

ART UNIT

PAPER NUMBER

3748

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

12/21/2006

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

NT

Office Action Summary

Application No.

10/533,286

Applicant(s)

OKAICHI ET AL.

Examiner

Theresa Trieu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on April 29, 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>Apr. 29, 2005</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is responsive to the applicants' election filed on Nov. 9, 2006.

Election/Restrictions

1. Applicants' election of the species of Figures 1-6, claims 1-3 and 4-21 being readable thereon is also acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Applicants' reason for traverse that the instant application contains a generic claim and reserves the right to file a divisional application on the non-elected claims is acknowledged; however, not a proper traverse for a restriction requirement.

Information Disclosure Statement

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Drawings

3. Figures 8-10 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to

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obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "COMPRESSOR FOR REFRIGERATOR-FREEZER HAVING A POROUS MEMBER BETWEEN ROTATION MOTOR AND COMPRESSION MECHANISM".

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9, 12 and 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 9, 12 and 15, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d); the phrase "the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP §2173.05(d).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-19 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by any one of Ozu et al. (Ozu) (Patent Number 5,782,622) or Arai et al. (Arai) (Publication Number JP 56-165788).

Regarding claims 1-3, Ozu (as shown in Figs. 1-8) or Arai (as shown in Figs. 4-6) discloses a compressor comprising a compression mechanism (40 in Ozu; 3, 4 in Arai) for compressing working fluid, a rotational motor including a stator (31 in Ozu; 12 in Arai), a rotor (32 in Ozu; 11 in Arai) for driving the compression mechanism and a container (20 in Ozu; 30 in Arai) for accommodating the compression mechanism and the rotational motor, in which the compressed working fluid flows from the compression mechanism to the rotational motor, the container includes a discharge pipe (not numbered; however, clearly seen in Fig. 1 in Ozu; 40 in Arai) on the opposite side of the compression mechanism with respect to the rotational motor, and the compressed working fluid flows from the rotational motor to the discharge pipe, wherein a space between the compression mechanism/discharge pipe and the rotational motor is defined by a porous member (50, 50A, 50B – see col. 6, line 32-38 in Ozu; 39 in Arai).

Regarding claims 4-8, Ozu or Arai discloses the porous member is mounted on an element other than the rotor and a shaft (33 in Ozu; 8 in Arai) fixed to the rotor; the compression mechanism (40 in Ozu; 3, 4 in Arai) including a bearing member (42, 43 in Ozu; 9 in Arai)

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which supports the shaft, and the porous member is mounted on the bearing member; the bearing member (42, 43 in Ozu) including a projection provided on a side of the rotational motor (30 in Ozu), and the porous member is mounted on a groove formed in an outer peripheral surface of the projection; the porous member (50, 50A, 50B in Ozu; 39 in Arai) being mounted on an inner wall of the container (20 in Ozu; 30 in Arai); the compression mechanism (40 in Ozu; in Arai) including a bearing member (42, 43 in Ozu) which supports the shaft (33 in Ozu) and an auxiliary bearing member (43 in Ozu) which supports the shaft together with the bearing member from both sides of the shaft on the opposite side from the bearing member with respect to the rotor.

Regarding claims 9-14, Ozu or Arai discloses wherein the porous member (50, 50A, 50B in Ozu; 39 in Arai) is made of porous material; the porous member (50, 50A, 50B in Ozu; 39 in Arai) being formed into a plate-like shape; a central portion of the porous member being thicker than an outer periphery of the porous member (see Fig. 8 in Ozu); the porous member (39 in Arai) being made of mesh (see Fig. 3 in Arai) the mesh being enveloped by a plate member having an opening; a central portion of the mesh being higher density than that of an outer periphery of the mesh.

Regarding claims 15-19 and 21, Ozu or Arai discloses porous member is made of porous plate (50, 50A, 50B in Ozu; 39 in Arai); the porous plate comprising a plurality of porous plates laminated on one another (50, 50A, 50B in Ozu; 39 in Arai); the porous plate (50, 50A, 50B in Ozu; 39 in Arai) having holes, and a diameter of a hole closer to a central portion of the porous plate is smaller than that of a hole closer to an outer periphery of the porous plate; the porous member (50, 50A, 50B in Ozu; 39 in Arai) being made of non-magnetic material; the porous

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member (50, 50A, 50B in Ozu; 39 in Arai) being made of insulative material; the compression mechanism (40 in Ozu) being of a rotary type.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ozu in view of Matsumoto et al. (Matsumoto) (Patent Number 6,592,347).

Ozu discloses the invention as recited above; however, Ozu fails to disclose the working fluid is carbon dioxide. Matsumoto teaches that it is conventional in the art to utilize carbon dioxide being used as the working fluid (see abstract). It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the carbon dioxide, as taught by Matsumoto in the Ozu apparatus, since the use thereof would have improved the performance and the efficiency of the compressor.

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Prior Art

The IDS (PTO-1449) filed on April 29, 2005 has been considered. An initialized copy is attached hereto.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and consists of six patents: Harlin et al. (U.S. Patent Number Re 27,691), Harlin et al. (U.S. Patent Number 3,684,412), Nagasaku et al. (U.S. Patent Number 4,447,196), Mangyo et al. (U.S. Patent Number 5,402,655), Awashima et al. (Publication Number JP 05-288179), and Arai et al. (Publication Number JP 59-034494), each further discloses a state of the art.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa Trieu whose telephone number is 571-272-4868. The examiner can normally be reached on Monday-Friday 8:30am- 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on 571-272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TT
December 12, 2006



Theresa Trieu
Primary Examiner
Art Unit 3748